WHAT IS CLAIMED IS:

1. An isolated antigen binding protein comprising a first variable region and a second variable region, wherein said first and second variable region binds to a CS-D7 target region.

2. The binding protein of claim 1, wherein said first variable region is a heavy chain variable (V_h) region comprising at least one complementarity determining region (CDR) selected from the group consisting of:

a first V_h CDR comprising SEQ ID NO: 46 or a sequence differing from SEQ ID NO: 46 by one amino acid;

a second V_h CDR comprising either SEQ ID NO: 36, SEQ ID NO: 38, SEQ ID NO: 39, SEQ ID NO: 41, SEQ ID NO: 43 or SEQ ID NO: 44, or a sequence differing from SEQ ID NOs: 36, 38, 39, 41, 43, or 44 by one amino acid; and,

a third V_h CDR comprising either SEQ ID NO: 37, SEQ ID NO: 42 or SEQ ID NO: 45, or a sequence differing from SEQ ID NOs: 37, 42, or 45 by one amino acid.

3. The binding protein of claim 2, wherein said V_h region comprises said first V_h CDR, said second V_h CDR and said third V_h CDR.

4. The binding protein of claim 3, wherein said first, second and third V_h CDRs, respectively, comprise the amino acid sequences selected from the group consisting of:

a) SEQ ID NO: 35, SEQ ID NO: 36 and SEQ ID NO: 37;
b) SEQ ID NO: 35, SEQ ID NO: 38 and SEQ ID NO: 37;
c) SEQ ID NO: 35, SEQ ID NO: 39 and SEQ ID NO: 37;
d) SEQ ID NO: 40, SEQ ID NO: 41 and SEQ ID NO: 42;
e) SEQ ID NO: 40, SEQ ID NO: 43 and SEQ ID NO: 45; and,
f) SEQ ID NO: 40, SEQ ID NO: 44 and SEQ ID NO: 42.

5. The binding protein of any one of claims 1-4, wherein said second variable region is a light chain variable (V_l) region comprising at least one complementarity determining region (CDR) selected from the group consisting of:

a first V_l CDR comprising either SEQ ID NO: 17, SEQ ID NO: 20, SEQ ID NO: 23, SEQ ID NO: 26, SEQ ID NO: 29 or SEQ ID NO: 32, or a sequence differing from SEQ ID NOs: 17, 20, 23, 26, 29, or 32 by one amino acid;

a second V_l CDR comprising either SEQ ID NO: 18, SEQ ID NO: 21, SEQ ID NO: 24, SEQ ID NO: 27, SEQ ID NO: 30 or SEQ ID NO: 33, or a sequence differing from SEQ ID NOs: 18, 21, 24, 27, 30 or 33 by one amino acid; and,

a third V_l CDR comprising either SEQ ID NO: 19, SEQ ID NO: 22, SEQ ID NO: 25, SEQ ID NO: 28, SEQ ID NO: 31 or SEQ ID NO: 34, or a sequence differing from SEQ ID NOs: 19, 22, 25, 28, 31, or 34 by one amino acid.

6. The binding protein of claim 5, wherein said V_l region comprises said first V_l CDR, said second V_l CDR and said third V_l CDR.

7. The binding protein of claim 6, wherein said first, second and third V_l CDRs, respectively, comprise the amino acid sequences selected from the group consisting of:

a) SEQ ID NO: 17, SEQ ID NO: 18 and SEQ ID NO: 19;
b) SEQ ID NO: 20, SEQ ID NO: 21 and SEQ ID NO: 22;
c) SEQ ID NO: 23, SEQ ID NO: 24 and SEQ ID NO: 25;
d) SEQ ID NO: 26, SEQ ID NO: 27 and SEQ ID NO: 28;
e) SEQ ID NO: 29, SEQ ID NO: 30 and SEQ ID NO: 31; and,
f) SEQ ID NO: 32, SEQ ID NO: 33 and SEQ ID NO: 34.

8. The binding protein of claim one of claims 1-7, wherein said binding protein is an antibody.

9. The binding protein of claim 8, wherein said first V_h CDR, said second V_h CDR and said third V_h CDR, respectively, comprise SEQ ID NO: 35, SEQ ID NO: 36 and SEQ ID NO: 37; and, said first V_l CDR, said second V_l CDR, and said third V_l CDR, respectively, comprise SEQ ID NO: 17, SEQ ID NO: 18 and SEQ ID NO: 19.

10. The binding protein of claim 8, wherein said V_h region comprises an amino acid sequence selected from the group consisting of amino acids 1-126 of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14 and SEQ ID NO: 16.

11. The binding protein of claim 10, wherein said V_l region comprises an amino acid sequence selected from the group consisting of amino acids 1-108 of SEQ ID NO: 1, SEQ

ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 9, SEQ ID NO: 11, SEQ ID NO: 13 and SEQ ID NO: 15.

12. The binding protein of claim 8, wherein said antibody comprises either:

a) a V_l region comprising amino acids 1-108 of SEQ ID NO: 1 and a V_h region comprising amino acids 1-126 SEQ ID NO: 2;

b) a V_l region comprising SEQ ID NO: 3 and a V_h region comprising SEQ ID NO: 4;

c) a V_l region comprising SEQ ID NO: 5 and a V_h region comprising SEQ ID NO: 6;

d) a V_l region comprising SEQ ID NO: 7 and a V_h region comprising SEQ ID NO: 8;

e) a V_l region comprising SEQ ID NO: 9 and a V_h region comprising SEQ ID NO: 10;

f) a V_l region comprising SEQ ID NO: 11 and a V_h region comprising SEQ ID NO: 12;

g) a V_l region comprising SEQ ID NO: 13 and a V_h region comprising SEQ ID NO: 14; or,

h) V_l region comprising SEQ ID NO: 15 and a V_h region comprising SEQ ID NO: 16.

13. The binding protein of claim 12, wherein said V_h region comprises amino acids 1-126 of SEQ ID NO: 2 and said V_l region comprises amino acids 1-108 of SEQ ID NO: 1.

14. The binding protein of any one of claims 8-13, wherein said antibody comprises a heavy chain comprising a hinge, CH_1, CH_2, and CH_3 regions from an IgG_1, IgG_2, IgG_3 or IgG_4 subtype; and a light chain comprising said V_l region, and either a human kappa C_l or human lambda C_l.

15. The binding protein of claim 1, wherein said binding protein is an antibody comprising a light chain which comprises SEQ ID NO: 1 and a heavy chain which comprises SEQ ID NO: 2.

16. A nucleic acid comprising at least one recombinant gene that encodes an antigen binding protein heavy chain variable (V_h) region or an antigen binding protein light chain variable (V_l) region as described in any one of claims 1-15.

17. A nucleic acid of claim 16, wherein said nucleic acid comprises two recombinant genes, a first recombinant gene encoding the antigen binding protein V_h region and a second recombinant gene encoding the antigen binding protein V_l region.

18. A recombinant cell comprising the recombinant nucleic acid of claim 16 or claim 17.

19. A method of producing a protein comprising an antibody variable region comprising the steps of:

a) growing the recombinant cell of claim 18 under conditions wherein said protein is expressed; and,

b) purifying said protein.

20. A pharmaceutical composition comprising the binding protein of any one of claims 1-15 and a pharmaceutically acceptable carrier.

21. A method of protecting or treating against an *S. aureus* infection in a patient comprising the step of administering to said patient an effective amount of the binding protein of any one of claims 1-15.

22. The method of claim 23, wherein said patient is a human and said antigen binding protein is administered in conjunction with surgery or a foreign body implant.

23. The method of claim 21, wherein said patient is a human infected with *S. aureus.*

24. Use of the antigen binding protein in any one of claims 1-15 in the preparation of a medicament for treating against *S. aureus* infection.

25. A polypeptide comprising an amino acid sequence with at least a 95% sequence identity to amino acids 42-342 of SEQ ID NO: 47, wherein said polypeptide is up to 350 amino acids in length.

5